

LIQUID LEVEL ASSEMBLY WITH DIAPHRAGM SEAL

Abstract of Disclosure

The present invention provides a liquid level assembly for controlling liquid
5 levels, the liquid level assembly having a switching mechanism responsive to the
liquid head to activate a pump. A housing assembly has an internal cavity in which
the switching mechanism is supported, the housing assembly having an open end
sealed by a diaphragm seal having a flexible planar portion that transmits head
pressure to the switching mechanism. The diaphragm seal also has a peripheral web
10 portion and a flexible bellows portion connecting the flexible planar portion and the
peripheral web portion. The peripheral web portion has a peripheral sealing bead that
is sealingly compressed against a groove in the housing assembly, and a plurality of
knob members extend from the peripheral web to press against the switching
assembly, thereby accommodating manufacturing dimensional tolerances of the
15 switching mechanism.